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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/779,315	02/08/2001	April Patricia Rasala	Rasala 3-21	4552
23506	7590	04/06/2004	EXAMINER	
GARDNER GROFF, P.C. PAPER MILL VILLAGE, BUILDING 23 600 VILLAGE TRACE SUITE 300 MARIETTA, GA 30067			PAYNE, DAVID C	
			ART UNIT	PAPER NUMBER
			2633	5
DATE MAILED: 04/06/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/779,315

Applicant(s)

RASALA ET AL.

Examiner

David C. Payne

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections

set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being obvious over Shiragaki US 5,457,556

(Shiragaki).

Re claim(s) 1, 3, 6, 7, 9, 10, 11, 14, 15

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Shiragaki disclosed (Figure 5)

A non-blocking wavelength division multiplexed (WDM) cross-connect device/ method (e.g., col./line:

5/1-5, 20-25), the device comprising: a first fabric (Figure 5, 13 - left) being adapted to receive a first

number of input fibers at an input side of said first fabric, wherein at least one of said input fibers is

capable of carrying at least two signals having different wavelengths; a second fabric (Figure 5, 13 -

right) being adapted to output signals onto first number of output fibers at an output side of said

second fabric, and wherein at least one of said output fibers is capable of carrying at least two signals

having different wavelengths;

at least one wavelength interchanger (Figure 5, 55) coupled by optical fibers to an output side of said

first fabric and to an input side of said second fabric (Figure 5, 13 - right); and a controller (Figure 11

#27) ;

A third fabric (Figure 5 #10) being adapted to be optically coupled on an input side of said third fabric

to said input fibers and to be optically coupled on an output side of said third fabric to said output

fibers; and a controller being configured to execute a routing algorithm that causes demands that do

not require a change in wavelength to be routed through said third fabric.

Shiragaki does not disclose wherein the controller is coupled to said first, second fabrics and to said

at least one wavelength interchanger, the controller being configured to execute a routing algorithm

that causes a demand that requires a change of wavelength to be routed through at least one of said

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at least one wavelength interchanger. The controller for illustration purposes is only shown in Figures 2 and 11, however it would have been obvious to one of ordinary skill in the art at the time of invention to attach the controller to the corresponding components in Figure 5 so that the network would be able to modify routes and switch signals in the network as is commonly practiced.

Furthermore, Shiragaki does not show a single pass-through third switch fabric (10) but two such fabrics. However, it would have been obvious to one of ordinary skill in the art at the time of invention to integrate the two switches into a single switch to simplify architecture control. Making parts separable is not patentable over the prior art.

Re claim(s) 2, 13, 17, 18

Shiragaki disclosed (Figure 5)

wherein said first number of input fibers is  $k$ , said first number of output fibers is  $k$  and wherein the device comprises  $k$  wavelength interchangers,  $k$  being an integer that is greater than or equal to 1.

Re claim(s) 4, 8, 12

Shiragaki disclosed (Figure 5) wherein the device is non-blocking (e.g., col./line: 5/5-20) in terms of both wavelength and routing, and wherein each of said  $k$  wavelength interchangers (55) is controlled by control

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signals (Figure 11 #27) received thereby to select a wavelength that a signal received on an optical fiber coupling the output side of the first fabric (13 left) to the wavelength interchanger is to utilize when the signal is routed by the wavelength interchanger onto an optical fiber coupling the wavelength interchanger to the input side (12-1) of the second fabric.

Re claim(s) 5

Shiragaki disclosed (Figure 5) wherein each of said k input fibers (see Figure 5 input of 12-1) is capable of carrying a plurality of signals having different wavelengths (col./line: 4/55-65), and wherein each of said k output fibers is capable of carrying a plurality of signals having different wavelengths (see Figure 5 output of 14-1).

Re claim(s) 16

Shiragaki disclosed: " A computer program" , " computer readable medium" or " code for controlling operations" (col./line: 11/30-50).

*Conclusion*

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (703) 306-0004. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (703) 305-4729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp



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